

# EDWARD G. BARTICK

Curriculum Vitae

**Education:** Ph.D. Materials Science: Polymers - 1978  
University of Connecticut  
Graduate Advisor: Prof. Julian F. Johnson

Dissertation: "Dimensions of Polymer Molecules at Finite Concentrations: Measurement and Interpretation by GPC"

Secondary Project: "Copolymer Analysis as a Function of Molecular Weight: Detected by FT-IR Spectroscopy"

M.S. Materials Science: Polymers - 1976  
University of Connecticut

B.A. Chemistry - 1970  
Southern Connecticut State University

## **Experience:**

4/86 - Present Federal Bureau of Investigation  
FBI Academy,  
Quantico, VA  
Research Chemist  
Top Secret Clearance  
Research project management of internal and external general procedure development for forensic examinations. Supervise post-doctoral research fellows, undergraduate and graduate student interns. Specialization has been in the development applications of Fourier transform infrared (FT-IR) and Raman spectroscopy for forensic examinations. An additional broad range of projects are overseen. Conduct and coordinate FT-IR and polymer analysis training classes for federal, state, and local forensic scientists. Research mentor for graduate students pursuing careers in forensic science. (Adjunct Professor at Virginia Tech, and Thesis Research Director at The George Washington University and The University of Virginia).

6/84 - 3/86 Spectra-Tech, Inc.  
Shelton, CT  
Senior Applications Chemist  
Development of FT-IR accessories and applications; marketing support.

- 8/81 - 5/84 Raymark Corporation  
Stratford, CT  
Supervisor of the Corporate Materials Analytical Research Laboratory for friction materials.
- 2/77 - 7/84 Perkin-Elmer Corporation  
Norwalk, CT  
Senior Applications Chemist  
Developed new applications for infrared spectrometry; conducted customer training and marketing support.
- 9/73 -2/77 University of Connecticut  
Institute of Materials Science  
Storrs, CT  
Ph.D. Student  
Teaching and Research Assistantships
- 10/70 - 9/73 Pfizer, Inc.  
Groton, CT  
Instrumentation Specialist (1 \_ yrs.)  
Designed and modified devices for automated QC of pharmaceutical analysis, repaired instrumentation.  
Research Assistant (1 \_ yrs.)  
Assisted in development of new QC methods using a wide range of analytical techniques.

**Honors and Awards:**

- Phi Lambda Upsilon, Honorary Chemical Society (1974).
- U. of Connecticut Research Foundation Summer Fellowship (1976).
- FBI Director's Incentive Award (1994 and 1996).
  - In 1994 for the development of forensic infrared analytical methods and an infrared training class.
  - In 1996 for the organization of the symposium, *An International Symposium on the Forensic Examination of Trace Evidence in Transition*.
- Award for *Innovative Analytical Research Presented as a Poster* at the Federation of Analytical Chemistry and spectroscopy Societies Meeting (FACSS), October 2003, for the poster, "Analysis of Children's Latent Fingerprints by Infrared Spectroscopy".

**Professional Activities:**

- American Chemical Society – Analytical Division
- Society of Applied Spectroscopy - Regional section delegate (1997)
- Coblenz Society
- American Academy of Forensic Sciences – Fellow
- Mid-Atlantic Association of Forensic Scientists

- Scientific Working Group for Materials Examination (SWGMAT)
  - Founder and Chairman 1994-1997
  - Current: Tape Subgroup participant.

SWGMAT conducts scientific seminars, develops guidelines and training manuals for forensic trace analysis. Subgroups include fibers, hair, paints, glass, and tapes. Guidelines are for quality control, training, and forensic examination and analysis. Members are from federal, state, and local US forensic laboratories. Representatives from England, Germany and Australia participate.
- European Fiber Group - USA Representative 1993-1995, 2004.

Similar to SWGMAT. Consists of approximately 30 represented countries and is a part of The European Network of Forensic Science Institutes (ENSFI)

**Publications:**

- Six Book Chapters
- 44 Scientific Papers and Technical Notes,

**Interests:**

- Current: Sailing, Skiing, Tennis, Mountain Biking
- Former: Youth Recreational Soccer Coaching (12 years), Boy Scout Leader (9 years)

**References:**

Upon request.